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APPLICATION NO. FILING DATE ATTORNEY DOCKET NO. FIRST NAMED INVENTOR CONFIRMATION NO. 09/971,710 10/09/2001 604-608 3204 Richard Albert Jones 05/21/2003 7590 NIXON & VANDERHYE P.C. **EXAMINER** 8th Floor PIERCE, JEREMY R 1100 North Glebe Road Arlington, VA 22201-4714 ART UNIT PAPER NOMBER

1771

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/971,710	JONES ET AL.
Office Action Summary	Examiner	Art Unit
	Jeremy R. Pierce	1771
Th MAILING DATE of this communication appears on the cover sh et with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status		
1) Responsive to communication(s) filed on 03 May 2002.		
2a) ☐ This action is FINAL . 2b) ☑ Thi	s action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims		
4)⊠ Claim(s) <u>27-33</u> is/are pending in the application.		
4a) Of the above claim(s) is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>27-33</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/or election requirement. Application Papers		
9) The specification is objected to by the Examiner.		
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.		
If approved, corrected drawings are required in reply to this Office action.		
12) The oath or declaration is objected to by the Examiner.		
Priority under 35 U.S.C. §§ 119 and 120		
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).		
a)⊠ All b)□ Some * c)□ None of:		
1. Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No. 09/285,256.		
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 		
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).		
a) ☐ The translation of the foreign language provisional application has been received. 15)☑ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.		
Attachment(s)		
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.	5) Notice of Informal P	(PTO-413) Paper No(s) atent Application (PTO-152)

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DETAILED ACTION

Specification

- 1. The abstract of the disclosure is objected to because the last line "(No figure appropriate)" should be deleted. Correction is required. See MPEP § 608.01(b).
- 2. The disclosure is objected to because of the following informalities: Appropriate headings should be used throughout the instant specification.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 27-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 27 recites "the fibers being bound together by a recrystallized melt comprising from 10% to 50% by weight of the polymer material". Is the recrystallized melt a blended material that comprises 10 to 50% by weight of the polymer material and 90 to 50% by weight of something else? Or is the recrystallized melt the same as the polymer material, but only 10 to 50% by weight of the polymer material becomes recrystallized? The language of claim 27 is confusing. The Examiner will assume that

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10 to 50% of the melt formed fibers become recrystallized, and not that the recrystallized melt is a separate material.

Claim 27 recites "wherein both fibers are recrystallised melt phase are derived from the molecularly oriented fibers". The first "are" seems errant. Also, recrystallized is spelled two different ways in the claim. The Examiner believes that this portion should read "wherein both fibers and recrystallized melt phase are derived from the molecularly oriented fibers".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 27, 28, 30, 31 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Alei et al. (U.S. Patent No. 4,600,631).

Alei et al. teach a fibrous substrate wherein the fibers are stretched to become molecularly oriented (column 5, lines 48-50). The fibers are then exposed to radiation to become partially cross-linked (column 6, lines 50-61). The fibers are then thermally bonded in a mold using heat and pressure without affecting the cross-linked fibers (column 7, lines 1-19). With regard to claims 30 and 31, the fibers in Alei may be made from Alathon 7030, which is a high density polyethylene with a uniform weight



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distribution that falls within the claimed range. With regard to claim 33, "up to 60% by weight of an organic filler" includes 0%.

Claim Rejections - 35 USC § 102/103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claim 29 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Alei et al.

With regard to claim 29, Alei et al do not disclose the limitation of cross-linking in an environment of alkynes or alkenes. However, such a limitation is a processing limitation for a product claim. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). The product of Alei et al. is the same as the product in Applicant's claim, even though the product is made by a different process.

Claim Rejections - 35 USC § 103

9. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alei et al.

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Alei et al. disclose a gel fraction of roughly 0.75 (column 6, line 60), which does not fall within Applicant's claimed range of 0.55 to 0.7. Alei et al. disclose that increasing the gel fraction of the fibers is a result effective variable that increases thermal stability of the fibers (column 2, lines 54-59). It would have been obvious to one having ordinary skill in the art to decrease the cross-linking of the fibers in order to allow more fibers to thermally bond, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Double Patenting

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 27-33 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 2 of U.S. Patent No. 6,458,727. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are directed to a polyolefin article

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comprising cross-linked fibers bonded to one another by a polymer melt phase of the same polyolefin.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent No. 5,628,946 to Ward et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy R. Pierce whose telephone number is (703) 605-4243. The examiner can normally be reached on Monday-Thursday 7-4:30 and alternate Fridays 7-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Jeremy R. Pierce

Examiner Art Unit 1771

May 19, 2003

ELIZABETH M. COLE PRIMARY EXAMINER

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